## COURSE PLANNER

# Bachelor of Engineering (Honours)(Chemical)

## SK401

## Semester 1 | 2025

#### Recommended Sequence

Units are listed on your Course Planner in a recommended sequence. However, this can be amended depending on unit availability, unit progression, timetabling and the semester in which you commenced your course.

## Year One

Semester 1   Feb/Mar 2025				
Unit Code	Unit Name	Pre-requisites		
ENG10001	Humanitarian Engineering Design Project	Nil		
CEE20005	Engineering Chemistry	Nil		
MTH10012	Calculus and Applications	Nil		
PHY10001	Energy and Motion	Nil		
MPU3273	Integrity and Anti-Corruption (Malaysian and International Students)	Nil		
Winter Term   June 2025				
MPU3212	Bahasa Kebangsaan A (Malaysian students who do not have SPM Bahasa Melayu credit)	Nil		
Semester 2   Aug/Sept 2025				
COS10025	Technology in an Indigenous Context Project	Nil		
MTH10013	Linear Algebra and Applications	Nil		
ENG10002	Engineering Materials	Nil		
ENG10003	Mechanics of Structures	Nil		
MPU3193	Philosophy and Current Issues (Malaysian and International Students)	Nil		

## Year Two

Semester 3   Feb/Mar 2026				
Unit Code	Unit Name	Pre-requisites		
CEE20001	Introduction to Chemical Engineering Design	ENG10001		
MME30002@	Engineering Management Project	100 Credit points		
MTH20010*	Statistics and Computation for Engineering	MTH10012 & MTH10013		
CEE30002	Reaction Engineering	Co-requisite: CEE20005		
MPU3183	Penghayatan Etika dan Peradaban (Malaysian Students Only)	Nil		
MPU3143	Malay Language Communication 2 (International Students Only)	Nil		
Semester 4   Aug/Sept 2026				
CEE20002	Chemical Engineering Thermodynamics	Nil		
CEE20003	Fluid Mechanics C	MTH10012 & MTH10013		
CEE20004	Process Safety and Sustainability	ENG10001		
COS10022 <sup>&amp;</sup>	Data Science Principles	Nil		

## Year Three

Semester 5   Feb/Mar 2027				
Unit Code	Unit Name	Pre-requisites		
CEE40005 <sup>@</sup>	Environmental Engineering	CEE20001		
CEE30004@	Process Heat Transfer	CEE20002		
CEE30006®	Process Modelling and Optimisation	CEE20001, MTH10012 & MTH10013		
CEE30007@	Process Control & Measurements	MTH10012 & MTH10013		
EAT20008 #	Professional Experience in Engineering	Introductory Seminar		
Semester 6   Aug/Sept 2027				
CEE30001 <sup>@</sup>	Transport Phenomena	CEE20002 & CEE20003		
CEE30003@	Process Mass Transfer	CEE20002		
CEE30005@	Multiphase Processes	CEE20003		
COS10009	Introduction to Programming	Nil		

## Year Four

Semester 7   Feb/Mar 2028				
Unit Code	Unit Name	Pre-requisites		
CEE40002@	Process Plant Design 1	CEE30006 & 275 Credit points		
ENG40005@	Final Year Capstone Project 1	287.5 credit points		
PEH20002 <sup>&amp;</sup>	Food Science	CHE10001/ CEE20005		
COS20083 <sup>&amp;</sup>	Advance Data Analytics	COS10022 & COS10009/SWE20004		
Semester 8   Aug/Sept 2028				
CEE40004@	Process Plant Design 2	CEE40002		
MEE40011	Renewable Energy and Hydrogen Technologies	Nil		
ENG40006@	Final Year Capstone Project 2	ENG40005		
BIO10003&	Concepts of Biotechnology	Nil		



#### How to use your Course Planner

Refer to the below table to help explain what units are required each semester throughout your course. The units in your planner are colour coded to assist you with mapping out your studies.

#### **Course Information**

Each unit is equivalent to 12.5 credit points.

To qualify for the award of this course, students must complete 33 units (400 credit points) comprising of:

#### 10 Core Units

#### 125 credit points

A set of compulsory units you MUST complete as part of your Course.

## 17 Chemical Major Units

**225 credit points** A set of compulsory units you MUST complete as part of your Course.

#### **5 Recommended Elective Units** 50 credit points

A combination of elective units or a Minor package.

#### 1 Industry Placement Unit

0 credit point A compulsory, not-for-credit unit.

General Studies/Mata Pelajaran Umum 0 credit points

All commencing students of Master, Degree, Diploma and Foundation programs will be automatically registered for the Academic Integrity Training Module in the first semester (Note: Students articulating from Foundation Studies are expected to undertake this unit as a refresher). There are 4 topics in this online module that are recommended for completion during Week 1-4 of your commencing study period. At the end of this module, students are required to complete a quiz comprised of 10 questions and achieve a score of at least 90%.

Ministry of Education requires that all NEW Cohorts pursuing Degree program (International and Malaysian) students must take the MPU units as a prerequisite for the award of their degree.

- Malaysian students: Must take and pass the units as a prerequisite for the award of their degree.
- International students: Must take and pass the units as a prerequisite for the award of their degree

#### Notes

- # EAT20008 Professional Experience in Engineering is compulsory for all engineering students and must be taken before the last semester of study as part of EAC's requirement. The introductory Seminar will be conducted in week 4 of the normal semester.
- @ Honours merit units
- & Elective units (can be customised). Please consult the Head of Department
- \* Compulsory pre-assigned elective unit